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THE OFFICE OF MYCOLOGY AND DISEASE SURVEY

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THE PLANT DISEASE REPORTER

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OFFICE OF MYCOLOGY AND DISEASE SURVEY

Vol. XIII July 15, 1929 Number 5

OFFICE NOTES

NEW YORK SURVEY

Arrangements have been made with the New York State College of Agriculture whereby Prof. H. H. Whetzel, Collaborator, will devote a considerable proportion of his time this summer to plant disease survey and collecting activities in New York. In this work he will be supported and assisted by members of the Department of Plant Pathology, and will enlist the aid of former students, field assistants, and others who may be able to supply information or specimens. We are looking forward to the results of this survey.

MARKET INSPECTION REPORTS DISCONTINUED

The abstracting of information from fruit and vegetable inspection certificates in cooperation with the Bureau of Agricultural Economics and the subsequent distribution of these abstracts to collaborators of the Plant Disease Survey, was discontinued in February. Instead of this there was substituted on February 20 the procedure of obtaining extra copies of the original inspection certificates which are filed by state of origin and by product in the Bureau of Agricultural Economics where they are available to all who wish to consult them.

FRUIT DISEASES

APPLE SCAB (VENTURIA INAEQUALIS)

Additional reports on apple scab are at hand from Massachusetts, New York, Pennsylvania, Illinois, Wisconsin, Iowa, and Montana. In Massachusetts, Davis reports it as very abundant with weather favorable for development. In New York, particularly in the Hudson Valley, the reports of field assistants indicate that, although scab was and still is abundant on the foliage, dry weather has checked fruit infection. From central Pennsylvania, Zundel reports that check-ups on the spray service show heavy leaf infection in poorly sprayed or unsprayed orchards or in orchards that have been sprayed with inferior materials. Where the spray service directions were followed to the letter, however, good control is being obtained. In one county where an inferior commercial spray material was used there was an average 40 per cent leaf infection on Black Twig as against 11.4 per cent where lime-sulfur was used. In an orchard of Northern Spys lime-sulfur gave practically absolute control while unsprayed checks showed 48 per cent leaf infection. Another orchard of sprayed Baldwins showed 0.6 per cent on the sprayed and 61 per cent on the check. Unsprayed McIntosh showed 90 per cent leaf infection.

In Wisconsin, Vaughan says that the abundant early infection has been checked by a timely drought so that at the present time the total amount of scab is somewhat less than normal.

In Iowa the disease is severe on both fruit and leaves according to R. H. Porter.

OREGON APPLE DISEASES

Under date of June 21, H. P. Barss reports that conditions during late spring were rather favorable for apple scab (Venturia inaequalis) development. Abundant shoot infections with powdery mildew (Podosphaera leucotricha) have been reported in some western Oregon orchards on susceptible varieties. Western anthracnose (Neofabraea malicorticis) in the form of canker infection is much less in amount than usual in western Oregon apparently on account of the dry fall of last year.

BACTERIAL BLIGHT OF PEAR AND APPLE

More reports from collaborators in New York, Virginia, Illinois, Wisconsin, and Iowa are to the effect that Bacillus amylovorus infection is common and in many cases severe on both hosts. Vaughan of Wisconsin estimates more than last year but not so bad as many years. Very severe damage is reported from some sections of Virginia.

OTHER PEAR DISEASES

Leaf spot caused by Septoria is reported as general and serious in some New York counties, especially Yates, Ontario, and Wayne. From the latter county, E. E. Frane reports:

"Can be found in most orchards but is not as general as last year. Last year one Seckel orchard was defoliated with this disease and the leaves had as high as 20 spots per leaf. The same orchard shows very few leaves with as many as 5 infections per leaf. Bordeaux used at a strength of 4-20-100 resulted in serious russetting when used as a calyx spray. Lime-sulfur used at the same time at a strength of 1 to 40 gave less russetting but burned the pear foliage."

From Oregon, H. P. Barss reports as follows on June 21:

Scab (Venturia pyrina)

Conditions during late spring very favorable for scab development.

Incense cedar rust (Gymnosporangium blasdaleanum)

Rather heavy infestations are reported from some orchards in the southern part of the Willamette Valley.

Blossom wilt (non-parasitic)

Very widespread and unusual amount of shrivelling of blossom clusters and even early leaves has been noted throughout western Oregon. The conditions responsible for this are not clearly understood.

TWO BLIGHTS OF OREGON CHERRIES

Brown rot blossom blight

In several Willamette Valley orchards early sweet cherries like the Royal Anne were severely attacked by blossom blight. In some cases nearly all the blossoms were attacked and the crop will be negligible. Culture tests have shown about three-fourths of this due to the European Sclerotinia cinerea; the rest to Sclerotinia fructicola, the common American brown rot. (H. P. Barss, June 21)

Bud blight (undet.)

Very severe killing of dormant buds of sweet cherry occurred last winter as in the past few years in certain Willamette Valley orchards. The Lambert variety appears particularly subject to the trouble. Serious crop reduction has occurred in a few mature plantings which formerly bore well. The cause is in doubt. (H. P. Barss, June 21)

GEORGIA AND ALABAMA QUARANTINED ON ACCOUNT OF PHONY PEACH

The quarantine on the States of Georgia and Alabama to prevent the spread of the phony peach disease was effective June 1.

Under the provisions of this quarantine, restrictions are placed on the interstate movement from the regulated areas of peach and nectarine trees, peach and nectarine roots, and all other trees shrubs grafted or budded on peach or nectarine roots. The areas affected cover sixty-four counties of central and western Georgia and one county of eastern Alabama as follows: Baker, Baldwin, Barrow, Bibb, Bleckley, Butts, Calhoun, Chattahoochee, Chattooga, Clarke, Clayton, Coweta, Crawford, Crisp, DeKalb, Dooly, Dougherty, Fayette, Fulton, Greene, Gwinnett, Hancock, Harris, Henry, Houston, Jackson, Jasper, Jones, Lamar, Laurens, Lee, Macon, Marion, Meriwether, Mitchell, Monroe, Morgan, Muscogee, Newton, Oconee, Oglethorpe, Peach, Pike, Pulaski, Putnam, Quitman, Randolph, Rockdale, Schley, Spalding, Stewart, Sumter, Talbot, Taliaferro, Taylor, Terrell, Troup, Twiggs, Upson, Walton, Washington, Webster, Wilkinson, and Worth Counties in Georgia; and Lee County in Alabama.

The shipment of peach, nectarine, and other restricted trees, or peach and nectarine roots interstate from the regulated areas will, under this quarantine, be conditioned on the securing of a permit from the United States Department of Agriculture. Such permits are to be issued only to nurseries "within which and within one mile of which no infection of the phony peach disease has existed for at least two years prior to the proposed date of movement."

NOTES ON GRAPE DISEASES

The following notes on grape diseases in the Rio Grande Valley were received from J. J. Taubenhaus and W. J. Bach on June 27:

Black rot (Guignardia bidwellii)

This disease seems to be unusually severe on the foliage and young fruit of certain varieties. Unless spraying is started immediately, the crop will be light.

Root rot (Phymatotrichum omnivorum)

Beginning to appear in young vineyards in the vicinity of Laredo.

Wind injury

Due to continuous prevailing strong winds, many berries of the young clusters are badly scarred. In most instances, however, the injury is of only superficial nature since a new skin is being formed immediately below the injured area. It is doubtful, however, if the original scars will disappear altogether.

The two following reports of the occurrence of black rot and powdery mildew in Arkansas are by V. H. Young (June 7) and H. R. Rosen (June 13) respectively:

Black rot (Guignardia bidwellii)

Already beginning to develop rather abundantly on the foliage and in some cases even on the young berries and promises to be severe.

Powdery mildew (Uncinula necator)

An unusual outbreak this year is that of powdery mildew of grapes, the oidial stage of which was detected on material sent in from Hope, Arkansas.

STRAWBERRY ROOT ROTS (UNDET.)

Massachusetts: I noticed many berry plants with yellowed leaves and dead around ground. Roots showed cortex rotted on low grounds. Severe in two patches. (W. H. Davis, July 10)

Wisconsin: Several cases have been reported. Plants shipped in from some distance have failed to root. The general assumption is that the spring drought is responsible. (R. E. Vaughan, July 1)

Kentucky: A severe case in strawberry developed in a planting on the Station grounds giving an opportunity to study it in some detail. A portion of the plants died before ripening fruit. Others lived until the fruit was ripe but it was undersized. A portion of the planting appeared healthy. In one place the disease appeared to have spread to the center of the row killing the plants completely in one-half while the plants in the other half remained alive. About 15 feet of row was affected in this way. A superficial examination strongly suggested a soil organism spreading rather rapidly but an examination of the roots in both halves of the row indicated that the difference in the top was a matter of degree, all of the roots being dead in one-half of the row and a few alive in the other half. A study of the soil conditions in the healthy area of the planting showed that it was underlayed by black soil about 30 inches deep whereas the diseased areas were underlayed by black soil about 8 to 10 inches deep under which was an impervious greyish clay which the soil chemists stated probably produced ferrous iron compounds when wet. These are toxic to roots. The close correspondence between soil depth and root condition suggests a toxic condition of the wet soil as the cause of root rot in this case. (W. D. Valleau, June 18)

REPORT ON PECAN SCAB (CLADOSPORIUM EFFUSUM) FROM GEORGIA

Since the June 7 report on scab, nut infection has appeared and increased unusually rapidly, being first observed in Mitchell County on June 8. Heaviest infection of nuts ever observed for this time of year. With the usual rains and infection periods that occur in July, the disease will in all probability take a heavy toll in such varieties as Delmas, Alley, Schley, Van Deman, in unprotected orchards. On July 1, nut infection in unprotected trees ran as high as 90 per cent, with from 1-25 spots per nut (Schley variety), in the Albany section. (O. C. Boyd, July 6)

DISEASES OF CEREALS

CEREAL DISEASES IN ILLINOIS

During the period June 19 to 28, Gilbert L. Stout of the Illinois Natural History Survey made observations on cereal diseases in central and northern Illinois. He submitted the following report on July 1:

Wheat

Leaf rust is abundant throughout the central and northern part of the State just as it was in the southern part two weeks ago. Wheat is in the milk and dough stage in these localities and it is a bit uncertain just how destructive the leaf rust epidemic may be as regards the final yield. Traces of stem rust were found in occasional fields. Septoria tritici is abundant in all fields. Scab is rather scarce in the extreme northern part where the wheat is in the flower or postbloom stage yet, but in central Illinois where the wheat is nearly ripe enough to cut prevalence runs as high as 18 and 20 per cent in some fields. Anthracnose can be found only occasionally in the northern half of Illinois.

Oats

Crown rust is just appearing on oats in the northern half of the State. As usual, the two serious diseases are blast and smut, the former often infecting more than half the panicles and destroying anywhere from 1 to a dozen spikelets; the latter ranging from 1 to 10 per cent in prevalence.

Barley

Smut and stripe are the two serious diseases on barley, smut often ranging up to 10 per cent infection, and stripe anywhere from 5 to 20 per cent. Scab is becoming prevalent where the crop is approaching maturity but seldom infecting more than two or three per cent of the heads. I do not look for as serious an epidemic of barley scab as we had last year.

Rye

In a few fields of rye that were examined leaf rust seemed to be the dominant disease, although anthracnose is quite frequently present. There probably will be no serious effects to the crop from either of these diseases.

STEM RUST OF WHEAT

In general, stem rust is about a week earlier than it was in 1928 and is occurring as a light sprinkling, whereas last year the infection occurred mostly in centers. In the Red River Valley, the rust has appeared as far north as Buxton, North Dakota, and in Minnesota to Warren. A scattering of rust also extends west to the Missouri River and to the vicinity of Minot. Local and

regional variations in rainfall and temperature have been so great that it is difficult to summarize conditions for any one of the wheat growing regions, to say nothing of all of them. Rust development has been checked by drought in large areas of South Dakota and in the Red River Valley of North Dakota and Minnesota. Elsewhere in the spring wheat area, even where there has been abundant rainfall, the rust does not seem to have increased rapidly since its first appearance, although it may do so soon. (Rust Reporter, Office of Cereal Crops and Diseases, June 29)

SOME WINTER WHEAT DISEASES IN COLORADO

E. L. LeClerg reports the following, July 3:

Stem rust (Puccinia graminis)

The winter wheat is ready to cut and has escaped rust. Conditions were such this spring that the rust did not develop until very late and the wheat matured before this disease could cause any damage.

Leaf rust (Puccinia tritici)

Has increased rapidly in abundance during the past week or ten days. Infection came so late that prevalence is considerably less than last year.

Foot rot (Helminthosporium sativum)

No cases have been reported or observed of this disease, which last year caused between 20 to 30 per cent loss in the dryland wheat of Colorado. Conditions were not as severe this past winter as a year ago which undoubtedly had something to do with the epidemic then.

TWO WHEAT DISEASES IN MONTANA

Foot rot caused by one or more Dematiacious fungi

I just returned from an extensive survey trip through central Montana and small adjacent regions in Wyoming and Alberta, during which special attention was given to foot rot of wheat, which has drawn attention to its seriousness during recent years.

Rotting and browning of the bases of stems is common in the fields of winter wheat examined. One field in Chouteau County will lose about 50 per cent in yield. One field of 130 acres in Judith Basin County will sustain a loss of 90 to 100 per cent due to foot rot, which occurred in milder form in the field mentioned in Chouteau County. In Judith Basin County, H. E. Morris found a group of fields of about 800 acres in which foot rot caused very serious damage. In this and Fergus Counties, several fields of winter wheat were reseeded this spring because the ravages of foot rot made them look too nearly worthless.

The other fields of winter wheat examined will probably lose 1 to 10 per cent in yield due to foot rot.

Throughout central Montana, southern Alberta, and northwestern Wyoming, spring wheat (chiefly Marquis) commonly showed a browning of 5 to 75 per cent of the bases of the stems. Most of this wheat was only 3 to 8 inches tall, so damage cannot be estimated now, since it will be influenced by the remainder of the growing season. This intense browning represents infection in most cases by dematiaceous fungi, as some microscopical examinations showed. A letter just received from Prof. G. B. Sanford in Alberta stated that foot rot has done serious damage there. He is giving considerable attention to this disease in survey and experimental work. Spring wheat predominates there. (P. A. Young, July 3)

Sclerotium blight (Typhula graminum)

Did serious damage in several fields in Gallatin County. Some fields were reseeded when this disease made them look unpromising this spring. Stands seriously thinned in some other fields. (P. A. Young, July 3)

PHYSODERMA ZEAE-MAYDIS ON CORN IN LOUISIANA

The leaf scorching from this disease is much more conspicuous than usual in the lowlands of the sugar cane belt. In many low, poorly drained spots, the plants have a badly scorched appearance. (E. C. Tims, July 1)

ALFALFA DISEASES IN OREGON

Winter injury

Considerable evidence of freezing injury has been reported from various sections of Oregon this spring. A severe case causing very serious losses near Bonanza was confirmed as being due to winter injury by Dr. F. R. Jones who examined the specimen microscopically. (H. P. Barss, June 22)

Bacterial root rot (Bacterium insidiosum) (?)

One case of bacterial root rot or wilt was reported from Douglas County. Bacterial invasion of xylem confined to last years wood in specimens examined microscopically. Probably associated with winter injury. (H. P. Barss, June 22)

HEAT CANKER OF FLAX IN NORTH DAKOTA

Canker has developed and is causing severe losses in scattered sowings in several sections of the state. Late sowings on new breaking have been particularly subject to damage. (W. E. Brentzel, June 24)

DISEASES OF VEGETABLE AND FIELD CROPS

BEAN DISEASES IN MARYLAND

W. A. Whitney of the Office of Horticultural Crops and Diseases visited the Eastern Shore June 27 to 28 and the Westminster section July 5

SNAP BEANS (PHASEOLUS VULGARIS)

Blight (Bacterium phaseoli et al)

On the Eastern Shore the bacterial blights are causing slight or no damage. Young plants of the Bountiful variety show traces to 5 per cent. Seventy-five per cent of the older plants may be affected but with very little damage.

On Burpee's Stringless Green Pod, blight was present in amounts from traces to 40 per cent, the more general distributions being correlated with the age of the plants. At Westminster the plants were the oldest seen.

On Giant Stringless Green Pod at Westminster there was 3 to 5 per cent blight but no damage.

Bacterium phaseoli and B. medicaginis phaseolicola were apparently about equally present although one would be preponderant in any given field. No attempt was made to estimate the relative distribution of the two bacteria.

A bacterial leaf spot resembling the one on lima beans caused by Bacterium vignae (B. viridifaciens)

At Allen, Kidney Wax beans were 5 to 10 per cent and Full Measure 100 per cent affected but in neither case was the infection sufficient to cause at present any reduction in yield.

Mosaic (undet.)

On Kidney Wax and Burpee's Stringless Green Pod, less than 1 per cent was noted. At three other stations (Cordova, Hurlock, and Ridgely) mosaic was present in the latter variety from 1 to 5 per cent of the plants. On the same variety at Westminster only traces were noted.

Sunscald (physiological)

Present in an unusual amount this year, traces to 5 per cent being noted in many fields of Burpee's Stringless Green Pod.

Hopperburn (Empoasca fabae) (?)

Traces were noted on Burpee's Stringless Pod at Westminster.

LIMA BEANS (PHASEOLUS LUNATUS)

Bacterial leaf spot (Bacterium vignae) (B. viridifaciens)

At Allen, Fruitland, and Mt. Vernon 80 to 100 per cent of the plants were infected. In Fruitland alone was the damage serious, the yield being cut about 50 to 80 per cent. The amount of disease in these fields was probably due to the lima crop being followed by cowpeas or lima beans. At the other two stations only slight or no damage as yet to the crop.

Mosaic (undet.)

At Allen and Fruitland traces to 2 per cent mosaic was noted. In appearance it is very nearly identical with that occurring on Phaseolus vulgaris.

Blight (Bacterium phaseoli)

Traces of blight were noted at Mt. Vernon.

SCLEROTIUM ROLFSII ON POTATOES IN TEXAS

Sclerotium rolfsii was very common on both the tubers and stems at the time of harvesting. The writers found about 75 per cent of the tubers were superficially covered with the strands of Sclerotium rolfsii and practically 100 per cent of the old stems in the field were also covered with hyphae of the same fungus. It is probable that the early dying of the potato vines in the lower Rio Grande Valley this spring was caused by S. rolfsii. The presence of hyphae of S. rolfsii on the apparently sound tubers may affect their shipping quality unless properly iced in transit. (J. J. Taubenhaus and W. J. Bach)

BACTERIUM LACHRYMANS ON CUCUMBER IN ARKANSAS

What seems to be the first report of the occurrence of angular leaf spot of cucumber in Arkansas was received from H. R. Rosen. Infection was rather heavy but damage did not appear to be serious. Very few fruits were found infected.

MISCELLANEOUS REPORTS ON DISEASES OF VEGETABLE AND FIELD CROPS

GREEN PEAS

Fusarium wilt in Wisconsin. Found in a few fields near Waupun (Fond du Lac and Dodge Counties). Not generally serious. (R. E. Vaughan, July 1)

Fusarium martii root rot in Colorado. Present in practically every pea field but does not cause appreciable losses. (E. C. Le Clerg, July 3)

SUGAR BEET

Black root (probably Phoma betae) in Montana. Supt. Dan Hansen at Huntley reported that there was a serious amount of black root in young sugar beets in about 25 per cent of the fields in that region. This thinned the stands too much, and seriously delayed the growth of many fields, so this disease can be reported as destructive this year. (P. A. Young, July 3)

BEAN

Rust (Uromyces appendiculatus) in Louisiana. Has been quite prevalent on late beans in the vicinity of Baton Rouge. Most of the plants are either partially or totally defoliated at the present time. (E. C. Tims, June 20)

WATERMELON DISEASES

Georgia: At this time, the end of the shipping season in the heavy producing sections of the southern part of the State, practically all fields are defoliated from downy mildew (Pseudoperonospora cubensis) and anthracnose (Colletotrichum lagenarium) and all melons sunburnt and poxed. While the minor leaf spots as Macrosporium, Cercospora, and Diplodina spots, were present during the early part of the season as usual, they failed to assume as much importance even as in the average year. The outstanding feature of the season was the early appearance of downy mildew with its severe defoliation of vines before anthracnose became epidemic. Ordinarily, downy mildew becomes prominent only after the shipping season is over and anthracnose has made an inroad on the foliage and melons. The greatest damage from downy mildew was done before the June rains began, around June 20; from anthracnose, after that date. The loss from Fusarium wilt (F. niveum), also was unusually early in the season this year. (O. C. Boyd, July 6)

Texas: Early watermelons are extensively grown in Raymondville by dry land farming. Due to early, dry weather conditions anthracnose was at first unimportant. Recent heavy rains have caused this disease to spread and to affect both foliage and fruit of watermelon plants. (J. J. Taubenhaus and W. J. Bach)

ASCOCHYTA BLIGHT OF COTTON IN GEORGIA

Ascochyta blight of cotton caused by A. gossypii Syd. has not been reported to the Survey for the past two years. Since its first appearance several years ago in epidemic form in Arkansas it has been found in most of the cotton states east of the Mississippi. However, Boyd's report from Georgia which follows seems to be the first from that State:

> "A clear cut case of this disease was mailed into my office July 3 from Banks County in the northern part of the State. The plants were badly stunted, with numerous leaf spots and stem cankers, all showing typical fruiting bodies of the fungus."

PHYMATOTRICHUM OMNIVORUM

The great host range and economic importance of the cotton root rot fungus is evident from the lists given in a recent bulletin of the Texas Experiment Station (Taubenhaus, J. J., B. F. Dana, and S. E. Wolff. Plants susceptible or resistant to cotton root rot and their relation to control. Texas Agr. Exp. Sta. Bull. 393. 30 pp. 5 figs. Feb. 1929). A total of 527 susceptible plants are named. At least 274 species of cultivated plants and 244 not ordinarily cultivated, including weeds, native plants, and trees, were found to be attacked.

DISEASES OF TREES

WILLOW SCAB (FUSICLADIUM SALICIPERDUM)

I made a two-day trip north from Pittsfield, Massachusetts, to Rutland, Vermont, thence across the mountain and down through the Bridgewater Valley to Bellows Falls, and thence to Amherst. I found the willow disease north in Vermont nearly to Manchester then I ran out of it, and did not see it again until I came off the mountain into the Bridgewater Valley. There practically at once I found a rather bad infection in some large willows, and from there down for a number of miles dead willows were to be seen. The farthest south that I made any collection was near Saxton River just a little east of Bellows Falls. It is rather peculiar that so far I have not seen the thing in the Connecticut Valley proper. I looked over all of the specimens which I collected to date and had no difficulty in finding spores in every collection made except one or two which at the time of collection I considered different. (Perley Spaulding, June 27)

WILLOW SCAB IN NEW YORK

Willow scab has been found as far west in this State as Ithaca. To date our collections indicate that it occurs only sporadically in New York. We have not found it on any large willow trees and in only one case have we found it really widespread and destructive. That was in a swamp at the foot of Oneida Lake. Determination was checked by G. P. Clinton. (H. H. Whetzel, July 10)

SYCAMORE ANTHRACNOSE (GNOMONIA VENETA)

Virginia: Extremely severe in State this year. In many instances complete defoliation has been noted. It is not uncommon to find three successive sets of leaves developing in one season on severely infected trees. (F. J. Schneiderhan)

Ohio: Quite general in central and southern part of State. (E. W. Mendenhall, June 11)

DISEASES OF ORNAMENTALS

STEM ROT OF VIOLET

Sclerotium rolfsii was found to be causing a severe stem rot of the garden violet at Virginia Beach and at Richmond, Virginia, during the last week of June. (G. Hamilton Martin)

SCLEROTIUM ROLFSII AND S. DELPHINII

Freeman Weiss reports that he has observed an unusual amount of Sclerotium rolfsii and S. delphinii attacking garden perennials this year. One case was of especial interest where the wild narrow leaf plantain growing in an uncultivated area was severely affected.

BLOSSOM BLIGHT OF HYDRANGEA

On July 1 a severe blighting of hydrangea blooms was observed at Richmond, Virginia. A considerable number of plants were inspected and practically every plant was diseased, at least 30 per cent showing heavy infection. In some instances the plants had been cut back severely on account of the disease. Blossom blight was first brought to my attention in 1927 when I observed it in several places in West Virginia. Specimens have since been received from Missouri in 1927 and 1929. Local infections have also been found this year at Alexandria and Norfork, Virginia, Chevy Chase, Maryland, and Washington, D. C. (G. Hamilton Martin, July 11)

NOTICE

SUMMER MEETING AMERICAN PHYTOPATHOLOGICAL SOCIETY

The program for the field meeting in North Carolina, July 29-31, which has just been received indicates a very interesting and instructive meeting. The new Carolina Hotel at Raleigh is the assembling point where rooms may be had at very reasonable rates ($2.50 single, $2.00 double). Those who are going are requested to notify the Committee in Charge, G. W. Fant, Secretary, State College, Raleigh, North Carolina.